

What is claimed is:

1. An electrical stimulation device for treatment of the heart comprising:
a canister containing circuitry for sensing and treating a heart rhythm irregularity, the canister sized and adapted for implantation to a patient; and
a lead assembly coupled to the canister, the lead assembly having:
a lead having proximal and distal ends, the proximal end adapted to be received by the canister, the distal end including an electrode assembly; and
an electrode assembly having a proximal end and a distal end, the proximal end secured to the lead, the electrode assembly including an electrode surface for delivering shocking energy to the patient and an opening for receiving an insertion tool.
2. The device of claim 1, wherein the opening faces proximally.
3. The device of claim 2, wherein the electrode assembly has a front side and a back side, wherein the electrode surface is disposed on the front side and the opening is disposed on the back side, the opening leading into a pocket defined by a piece of material secured to the back side and having a closed distal portion.
4. The device of claim 3, wherein the electrode assembly further comprises a fin secured to the back side, the fin disposed with respect to the piece of material to at least partially define the opening.
5. The device of claim 2, wherein the electrode assembly has first and second lateral sides, the opening defined on one of the first and second lateral sides, the electrode assembly further including a contralateral opening defined on the other of the first and second lateral sides, the opening and the contralateral opening sized to receive tines of an insertion tool.

6. The device of claim 1, wherein the electrode assembly includes an electrode and a molded cover, the molded cover having a front side and a back side, the front side adapted to define an electrode opening, wherein the electrode is disposed in the molded cover, the molded cover including a skirt portion extending around and over a portion of the electrode to define the electrode opening and cover the edges of the electrode.

7. The device of claim 6, wherein the electrode assembly further includes stitching securing the electrode between the skirt portion of the molded cover and the back side of the molded cover.

8. The device of claim 6, further comprising a piece of material secured to the molded cover and defining the opening.

9. The device of claim 8, wherein the piece of material defines the opening on the back side of the molded cover.

10. The device of claim 8, wherein the electrode assembly includes first and second lateral sides, wherein the piece of material is secured such that the opening is defined at one of the first and second lateral sides.

11. The device of claim 1, wherein the electrode assembly has a front shocking side and a back side, the electrode assembly further including a fin on the back side, the opening defined on the fin.

12. A lead assembly comprising:
an electrode assembly; and
an elongated lead having a first end including a connector and a second end secured to the electrode assembly; wherein the electrode assembly includes:
an electrode having at least one outside edge;

a molded cover, the molded cover having a back portion and a skirt portion, the skirt portion and back portion composed of one piece of material; and
means for receiving an insertion tool secured to the molded cover;
wherein the electrode assembly is configured such that the electrode is received by the molded cover to define an electrode surface surrounded by the skirt, the molded cover receiving and isolating the outside edge of the electrode.

13. The lead assembly of claim 12, wherein the means for receiving an insertion tool comprises a piece of material secured to the back portion of the molded cover.

14. The lead assembly of claim 13, wherein the molded cover is secured to or formed with a fin on the back portion, the piece of material being secured over the fin.

15. The lead assembly of claim 12, wherein the molded cover includes first and second lateral edges, wherein the means for receiving an insertion tool includes a piece of material secured to one of the lateral edges to define an opening for receiving the insertion tool.

16. The lead assembly of claim 15, wherein the means for receiving an insertion tool further includes another piece of material secured to the other of the lateral edges to define another opening for receiving the insertion tool.

17. A method of inserting an electrical cardiac treatment device comprising:
providing a lead assembly for the electrical cardiac treatment device including a lead and an electrode assembly, the electrode assembly including an opening for receiving an insertion tool;
providing an insertion tool adapted to be received by the opening;
making an incision in a patient;
defining a subcutaneous pathway in the patient with a dissection tool;
coupling the insertion tool to the lead assembly;

advancing the combination of the insertion tool and the lead assembly into the subcutaneous pathway; and
removing the insertion tool to leave the lead assembly in place.

18. The method of claim 17, wherein the electrode assembly has a front shocking surface and a back surface, the opening being defined by a piece of material secured to the back surface, the piece of material further defining a pocket for receiving the insertion tool.

19. The method of claim 18, wherein the electrode assembly further comprises a fin extending from the back surface beneath the piece of material and at least partially defining the opening.

20. The method of claim 17, wherein the electrode assembly has first and second lateral sides, wherein the opening is provided on one of the first and second lateral sides, the electrode assembly further including a contralateral opening on the other of the first and second sides, wherein the insertion tool includes first and second tines spaced and sized for insertion into the opening and the contralateral opening.